IN THE SPECIFICATION

Please amend the paragraph at page 26, line 8 through page 29, line 3 as follows:

The noise detector 24 in the master station 1 monitors optical beat noise (hereinafter called OBI: Optical Beat Interference) periodically and, if the amount of the OBI becomes more than a threshold value (hereinafter abbreviated as Vth), enters a flow for controlling the wavelength of the slave station 2 (S100). Each slave station 2 is assigned its own specific frequency band for sub-carrier multiplexing. The master station 1 detects a frequency component contained in the OBI (S110) to identify, based on the detection result, slave stations 2 i and 2 i+1 (S120). The master station [[2]] 1 selects either one of these slave stations 2. It is here supposed that the slave station 2 i+1 is selected. The master station 1 sets a preset temperature value for the slave station 2 i+1 higher than the temperature of the laser diode of the slave station 2 i+1 (S130), to control the wavelength securely. The master station 1 then transfers the wavelength control signal 111 to the slave station 2 i+1 to then shift the wavelength of the slave station 2 i+1 to a longer side (S140). A wavelength shift amount d λ is 0.05 nm, for example. The magnitude of the wavelength shift amount d λ only needs to mitigate the OBI and, not to generate new OBI with other slave stations 2. As will be described later, the amount of the OBI has little effect if the inter-wavelength spacing is not less than 0.16 nm. To detect the OBI, it is optimal to first search for the spacing of 0.16 nm or so where the OBI amount starts to change. At a larger wavelength difference, the OBI amount levels off at −140 dB/Hz or less, thus making it possible to detect the occurrence of OBI. If the OBI is detected and the wavelength is shifted by d λ supposed to be 0.05 nm, the inter-wavelength spacing becomes 0.11 nm or 0.21 nm. If the inter-wavelength spacing between the slave stations 2 i and 2 i+1 becomes 0.21 nm, the OBI is suppressed down sufficiently. Additionally, if it is 0.11 nm, the OBI becomes large in amount but of such a value of −130 dB/Hz, still not goring so far as to have a catastrophic influence on the transfer quality of the received signal 106. The magnitude of d λ = 0.05 nm is, therefore, appropriate but may be any other value. When the wavelength is shifted, the OBI is measured by the noise detector (S150, S160). If the OBI is decreased in level to Vth or less, the control flow

ends (S170). If the OBI is indeed decreased but still not less than Vth, new OBI may have occurred with any other slave stations 2, so that the process identifies again such slave stations that are concerned with the occurrence of the OBI (S180). If no OBI-concerned slave station 2 is detected newly, the process shifts the wavelength of the slave station 2 i+1 to a longer side again (to S140). If a new OBI-concerned slave station 2 i+2 is detected, on the other hand, it is decided to be due to OBI with the slave station 2 i+1 as wavelength-shifted, the process goes along a wavelength control flow with the slave stations 2 i+1 and 2 i+2 (to S120). In FIG. 9, variables of 2 i+1 and 2 i+2 are exchanged with variables 2 i and 2 i+1 in the case (a). If the OBI is increased in level, on the other hand, there are two possible cases. First, the slave station 2 i+1 has generated OBI with a slave station 2 i+2 other than the slave station 2 i. Second, the slave stations 2 i and 2 i+1 have got close to each other in wavelength. When the OBI has increased, therefore, the process first identifies a slave station 2 concerned with the OBI (S190). If an OBI-concerned slave station 2 is detected newly, the first case applies. In the first case, it is necessary to reduce the level of the OBI of the slave stations 2 i+1 and 2 i, so that the wavelength of the slave station 2 i+1 is to be left as shifted. Then, the wavelength of the slave station 2 i+2 is to be shifted to a longer side. FIG. 9 shows a situation where the slave stations 2 i+1 and 2 i+2 are exchanged with the slave stations 2 i and 2 i+1 in the case (a) to then repeat a wavelength control flow.